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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,427	02/27/2004	Paul Alistair Thomas	684-011708-US (PAR)	6990
2512	7590	11/01/2006	EXAMINER	
PERMAN & GREEN 425 POST ROAD FAIRFIELD, CT 06824			LA, NICHOLAS T	
			ART UNIT	PAPER NUMBER
			2617	

DATE MAILED: 11/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/788,427

Applicant(s)

THOMAS ET AL.

Examiner

Nicholas T. La

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☒ Other: Copy of JP 2001-076581

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1) **Claims 1, 6, and 11** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The newly added features to the claims including "a substrate located within the cover" and "a plurality of apertures through which the plurality of pressure transmitters pass to activate the plurality of key switches" have not been described, discussed, or clearly explained in the original specification.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**2) Claims 1, 4-6, 9-11, 14-16** are rejected under 35 USC 103(a) as being unpatentable over Sun (U.S. Pub. No. 2003/0153349) in view of Noboru et al. (JP 2001-076581) and further in view of Joniken et al. (US Pub. No., 2003/0201983).

Regarding **claims 1, 6, 11**, Sun teaches a communication device comprising a keymat (Figure 1a, element 126), a cover (Figure 1a, element 110), and a substrate located within the cover comprising a plurality of key switches (see Abstract; paragraph [0009]-[0012]; [0030]). The keymat comprises a plurality of lips located at and extending outward from edges of said keymat toward a rim of the cover (Figure 4c, lips, element 124, extending outwardly from edges of keymat as shown in figure 4c toward the rim of the housing), and the cover comprises a plurality of indentations (Figure 4c, element 114) to receive plurality of said lips, wherein the lips attach the edges of the keymat to the cover (Figure 4c; paragraph [0029], [0032]) and said indentations are located at edges of a recess for removably mounting said keymat (Figure 4c, element 114; paragraph [0029], [0032], [0034]).

Sun teaches a key module and engaging members to make contact between the keypad and the body; however, Sun does not expressly teach the key module is bendable and a plurality of pressure transmitters extending from an interior surface of

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the module. In an analogous art, Noboru et al. teaches the key module is bendable (Figure 1, 2; see Abstract; paragraph [0015]-[0016]) and a plurality of pressure transmitters extending from an interior surface of the key module (Figure 2, 3; paragraph [0010]-[0011]). Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify Sun to include the key module is bendable and a plurality of pressure transmitters extending from an interior surface of the module such as taught by Noboru et al. in order to provide a key top board with excellent responsiveness to a product shape by making it freely bendable any directions.

Sun and Noboru et al. teaches a body, i.e. cover, with printed circuit board and a keymat with plurality of pressure transmitters extending from the interior; however, does not expressly teach the cover also includes a plurality of apertures through which the plurality of pressure transmitters pass to activate the plurality of key switches located within the cover. In an analogous art, Joniken et al. teaches the cover also includes a plurality of apertures through which the plurality of pressure transmitters pass to activate the plurality of key switches located within the cover (Figure 3; paragraph [0008]-[0012]; [0031]-[0032]). Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify Sun and Noboru et al. to include the cover also includes a plurality of apertures through which the plurality of pressure transmitters pass to activate the plurality of key switches located within the cover such as taught by Joniken et al. in order to provide a mobile station keymat that can be conveniently

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removed and installed so that the user may easily exchange the keymat for aesthetic or functional reason.

Regarding **claims 4, 5, 9, 10, 14, 15**, Sun further teaches a communication device wherein said keymat comprises one or more guiding recesses, and said cover comprises one or more corresponding guiding pieces (Figures 1a, 2a, 3a, 4a; paragraph [0029], [0032]-[0033]; rib, i.e., Sun teaches that the key module is successfully assembled to the body by the engaging members or protrusions respectively engaged, lined up, or guided to the corresponding slots or holes thereby the elements are acting as guiding elements for a successful operation of inserting the key modules into the device body).

Regarding **claim 16**, Sun further teaches a communication device wherein said keymat is being molded in one piece (Figure 1a, 2a, 3a, 4a).

**3) Claims 2-3, 7-8, 12-13** are rejected under 35 USC 103(a) as being unpatentable over Sun (U.S. Pub. No. 2003/0153349) in view of Noboru et al. (JP 2001-076581) in view of Joniken et al. (US Pub. No., 2003/0201983) and further in view of Kfoury et al. (U.S. Pub. No. 2003/0119543).

Regarding **claims 2, 7, 12**, Sun, Noboru et al., and Joniken et al. further teaches communication device wherein said keymat comprises one or more guiding slots and

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said cover comprises one or more corresponding engaging member pieces (Sun; Figure 1a, element 113, 123). Furthermore, Sun teaches that various changes and modification can be made without departing from the spirit and scope of his/her invention. However, Sun does not expressly teach said keymat comprises one or more guiding pieces and said cover comprises one or more corresponding guiding recesses. In an analogous art, Kfoury et al. teaches said keymat comprises one or more guiding pieces and said cover comprises one or more corresponding guiding recesses (Figure 4, 5; paragraph [0032]-[0033]; Kfoury teaches that that the key module is successfully assembled to the body by the engaging members including grooves, rails, contact pad and receptacle respectively aligned and engaged, lined up, or guided to the corresponding members thereby the elements are acting as guiding elements for a successful operation of inserting the key modules into the device body). Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify Sun communication device to include said keymat comprises one or more guiding pieces and said cover comprises one or more corresponding guiding recesses such as taught by Kfoury et al. as an alternative for the same purpose of aligning the interchange-able the process of attaching, connecting, or securing said keymat to said cover.

Regarding **claims 3, 13**, Kfoury further teaches said guiding pieces that are arranged in direct connection to one or more of said plurality of lips (Figures 4, 5).

Regarding **claim 8**, Kfoury et al. further teaches a cover wherein said one or more guiding recesses are arranged in direct connection to one or more of said plurality of indentations (Figure 4, 5).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas T. La whose telephone number is (571)-272-8075. The examiner can normally be reached on Mon-Fri 8:30-5:00.



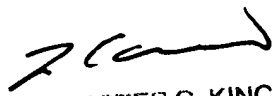
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571)-272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Nicholas La  
10/17/2006



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